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and that their *Classes* were so order'd by such *specifick* differences, that one might better know where to range them, as in a good perfection is now done in the *Vegitable Kingdom*, that is more numerous.

But to conclude, I observed the Eyes in the *Yellow Gurnard* were placed more on the top of the Head, and the Skin here covered almost half of them, like an *Eye-lid*; which I did not observe in the *Red Gurnard* whose Eyes were placed more at the sides of the Head. The Head likewise of the *Red Gurnard* was more protuberant, in the *Yellow*, flatter. The End of the *Rostrum*, the Teeth and Tongue in both were exactly alike; only in the Palat of the *Yellow Gurnard* I observed two *Cartilagonous* Bones, whose edges were bended downwards from the Palat, and did serve, as I supposed, for the hooking in and staying the Cartilage of the Tongue, when it makes a Compression for the forcing out the Water by the *Foramina* of the Head: Which Contrivance I did not find in the *Red Gurnard*, not having the like occasion for them.

This Fish being stale, I had not opportunity of dissecting it, and observing the *Viscera*: And shall only farther add, That the Gills had four Osseous *Radij* of each side. But of these more, if I happen to get another of this sort.

VII. Problema Medicinæ Cultoribus solvendum proponit Guilielmus Cockburn, M. D. R. S. S.

Experientiâ constat quam diversæ sint medicamentorum Operationes pro Temperamentorum, *Ætatum*, ac ejusdem ætatis diversi statûs varietate. Magis vero conspicua sunt Emeticorum & Purgantium opera: Adeo, ut quæ provectiores atate quam lenissimè purgant, Infantes obruant: quæ jussu Cathartici Dose hodie propinamus, nimis

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nimis vel minimè nos crastino afficiunt die. Immo ad hanc omnem diversitatem operantur Temperie solummodo differentibus.

Quum igitur tam invicta sit ubiq; difficultas in debita Pharmacorum evacuantium dose decernendâ; optandam esset, methodus quâ possimus eadem absq; dubio administrare.

Methodum hanc apodeicticis expeditis argumentis, simul & sigillis oclusam prædidi nostro commisit.

Rogat tamen Medicos quoslibet, quænam sit illa vel similis Methodus quâ sine errore dirigamur; eorumque solutiones ad Cal. Mart. 1705-6 exportabit, quas postmodum cum suâ publicabit.

VIII. *Part of a Letter from Dr David Krieg, F. R. S. to the Publisher, concerning Cobalt, and the Preparations of Smalt and Arsenic.*

I Spent about 8 weeks in my own Country, and my chiefest Business was to enquire for the Minerals found thereabout, and to observe their preparations. First, I shall describe the preparation of the blue Colour, called *Smaltum*, which is made of *Cobalt* or *Cadmia nativa*, because it is not clearly described by any Author, as much as I know.

Now the *Cadmia* or *Cobalt* is a massie, heavy, grey shining Stone, found in a great quantity in the Mines about *Shneeberg*, and some other places of *Hermannduria*. It is very often mixed with *Marcasite*, sometimes with Silver and Copper Oar, yea, the Silver is (but seldom) pure in the Figure of Hair.

After they have pick'd out the *Cobalt*, and separated it from the common Stone, they beat it to Powder by an Engine or Machine, commonly used in Mines (called a *Poolwork*.) By that Operation, the Water carries away the light stuff and Sand, leaving the heaviest behind.

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